

MARKUS, G.A.; ~~Prinimali~~ uchastiye: ZHIVOGLAZOVA, L.Ye.; NIKITINA, V.A.;
AKIMOVA, N.V.; GOL'DINA, F.M.; SMIRNOVA, A.M.

New reagents based on products from the coal chemicals industry.
Koks i Khim. no.2:52-54 '63. (MIRA 16:2)

1. Fenol'nyy zavod (for Markus).
institut (for all except Markus).
(Coke industry ~~By~~-products)
2. Ukrainskiy uglekhimicheskiy
(Chemical tests and reagents)

ASHIKHMIN, A.K.; BUKANOV, M.A.; DLUGACH, B.A.; DOBROSEL'SKIY, K.M., inzhener;
KOSTRYKIN, A.A.; LEBEDEVA, T.P.; NIKITIN, V.D.; PABERROV, Ya.D.;
NIKITINA, Y.D., professor, redaktor; GULEV, Ya.P., redaktor; VERINA,
G.P., tekhnicheskii redaktor

[Handbook for hump yard workers] Rukovodstvo rabotnikam sortirovochnoi gori. Moskva, Gos. transp. zhel-dor. izd-vo, 1950. 222p
[Microfilm] (MLRA 10:1)

1. Russia (1923- U.S.S.R.) Ministersvo putey soobshcheniya
(Railroads--Hump yards)

S/080/62/035/011/006/011
D287/D307

AUTHORS: Yakubchik, A.I., and Nikitina, V.D.
TITLE: The chemical structure of rubidium - divinyl polymers
PERIODICAL: Zhurnal prikladnoy khimii, v. 35, no. 11, 1962,
2491 - 2495

TEXT: Butadiene polymers were prepared in the presence of metallic rubidium at -50° and $+60^{\circ}\text{C}$ by introducing 0.5 % fused rubidium, in a N_2 -current, rapidly into tubes containing butadiene. Purified nitrogen was bubbled through the tubes, which were then sealed. The yields were 99 % for the polymer prepared at -50°C (polymer I) and 96 % for the polymer prepared at $+60^{\circ}\text{C}$ (polymer II). Polymer I had a low and polymer II a high degree of elasticity. The total unsaturation in polymer I was 87 % (identical to the unsaturation in Na-butadiene polymers). The percentage of 1,2-chains, determined by ozonolysis, was 49 % in polymer I and 42 % in polymer II. Total unsaturation in polymer II was not determined as the polymer was not completely soluble in CCl_4 or in CHCl_3 . The ozonolysis products

S/080/62/035/012/010/012
D204/D307

AUTHORS: Yalubchik, A.I. and Nikitina, V.D.
TITLE: The chemical structure of divinyl polymers obtained
in the presence of butyllithium
PERIODICAL: Zhurnal prikladnoy khimii, v. 35, no. 12, 1962,
2749-2753

TEXT: The purpose of the present work was to determine the chemical structure of divinyl polymerized in the presence of LiBu (1 mole/1500 moles of divinyl), under strictly anhydrous conditions, at 16 and 80°C, in an atmosphere of O₂-free N₂ by studying both the proportions of the 1,2- and 1,4-linkages and the structures of portions formed from these links. The polymers were studied by treatment with ozone, oxidative fission of the ozonides, and chromatographic separation of the resulting acids (propionic, succinic, acetic, formic, 1,2,4-butametricarboxylic, 1,2,3-propametricarboxylic, and 1,x,y,6-hexametricarboxylic). At 16°C, 55.3% of the carbon skeleton of the polymer contained 1,4-1,4 links and

NIKITINA, V.D.; KHOLCHEV, N.V.; ANDREYEVA, Z.M.; SOKHINA, A.M.;
CHERNOKHVOSTOVA, Ye.V.; PLETENEVA, I.L.

Properdin system and ~~its~~ **role** in infection and immunity. Report
No.1: The production of active preparations of zymosan. Zhur.
mikrobiol.epid.i immun. 31 no.8:12-19 Ag '60. (MIRA 14:6)

1. Iz Moskovskogo instituta epidemiologii, mikrobiologii i gigiyeny.
(POLYSACCHARIDES) (ZYMOSAN) (PROPERDIN)

ANDREYEVA, Z.M.; NIKITINA, V.D.

Properdin system and its role in infection and immunity. Part 2:
Determination of biological activities of zymosan. Zhur.mikrobiol.
epid.i immun. 31 no.11:49-53 N '60. (MIRA 14:6)

1. Iz Moskovskogo instituta epidemiologii, mikrobiologii i gigiyeny.
(ZYMOSAN)

CHERNOKHVESTOVA, Ye.V.; NIKITINA, V.D.; KOVALEVSKAYA, L.L.; KHOLCHEV, N.V.

Properdin system and its role in infection and immunity. Part 3:
Modified serological method for properdin titration. Zhur.mikrobiol.
epid.i immun. 31 no.11:53-58 N '60. (MIRA 14:6)

1. Iz Moskovskogo instituta epidemiologii, mikrobiologii i gigieny,
(PROPERDIN)

SAVVE, V.D.; FOFANOV, V.I.; NIKITINA, V.D.

Use of the multimembrane electrodecontation method in the purification and concentration of proteinase. Vop. med. khim. 7 no.5:532-537 8-0 '61. (MIRA 14:10)

1. The Research Institute of Sanitation of the Ministry of Defense of the U.S.S.R.

(PROTEINASE)

CHERKASOV, V.L.; CHERNOKHVOSTOVA, Ye.V., kand.med.nauk; NIKITINA, V.D.

Content of blood properdin in erysipelas patients. Vrach.delo
no.11:99-101 N '62. (MIRA 16:2)

1. Moskovskiy institut epidemiologii i mikrobiologii i kafedra
infektsionnykh bolezney (zav. - prof. K.V. Bunin) I-go Moskovskogo
meditsinskogo instituta.
(ERYSIPELAS) (PROPERDIN)

POKROVSKIY, V.I.; CHERNOKHVESTOVA, Ye.V.; N. KITINA, V.D.

Properdine system and its role in infection and immunity. Report
No. 7. Zhur.mikrobiol., epid.i immun. 33 no.8:131 Ag '62.
(MIRA 15:10)

1. Iz Moskovskogo instituta epidemiologii i mikrobiologii i iz
kafedry infektsionnykh bolezney I Moskovskogo ordena Lenina
meditsinskogo instituta.
(PROPERDINE) (MENINGES--TUBERCULOSIS) (MENINGITIS)

CHERKASOV, V.L.; CHERNOKHVOSTOVA, Ye.V.; NIKITINA, V.D.

Properdin system and its role in infection and immunity.
Report No.6: Properdin in erysipeloid. Zhur. mikrobiol.,
epid. i immun. 40 no.3:121-122 Mr '63. (MIRA 17:2)

1. Iz Moskovskogo instituta epidemiologii i mikrobiologii
i kafedry infektsionnykh bolezney I Moskovskogo ordena
Lenina meditsinskogo instituta.

NIKITINA, V.D.; KHOLCHEV, N.V.; CHERNOKHVESTOVA, Ye.V.; SOKHINA A.M.

Properdin system and its role in infection and immunity.
Report No.4: Preparation of properdin from placental serum.
Zhur. mikrobiol., epid. i immun. 33 no.11:132-137 N '62.
(MIRA 17:1)
1. Iz Moskovskogo instituta epidemiologii i mikrobiologii.

CHERNOKHVESTOVA, Ye.V.; STARSHINOVA, V.S.; Kholchev, N.V.;
NIKITINA, V.D.

Properdin system and its role in infection and immunity.
Report No. 5: Properdin in typhoid fever. Zhur. mikrobiol.,
epid. i immun. 40 no.2:108 F '63. (MIRA 17:2)

1. Iz Moskovskogo instituta epidemiologii i mikrobiologii
i iz kafedry infektsionnykh bolezney I Moskovskogo ordena
Lenina meditsinskogo instituta.

NIKITINA, V.F.

Surgical treatment of hardness of hearing in otosclerosis by means of mobilization of the stapes; after Professor Rozen's method. Trudy gos. nauch.-issl. inst. ukha, gorla i nosa no.11:303-310 '59. (MIRA 15:6)

1. Iz klinicheskogo otdeleniya Gosudarstvennogo nauchno-issledovatel'skogo instituta ukha, gorla i nosa.

(OTOSCLEROSIS)

(TYMPANAL ORGAN—SURGERY)

NIKITINA, V.F.

Experience in the surgical treatment of patients with conduction deafness in otosclerosis by stapes mobilization. Vop.otorin. 21 (MIRA 13:4)
no.6:39-48 M-D '59.

1. Iz Gosudarstvennogo nauchno-issledovatel'skogo instituta ucha, gorla i nosa (direktor - zasluzhennyy deyatel' nauki prof. V.K. Trutnev) Ministerstva zdravookhraneniya RSFSR i laringologicheskogo otdeleniya klinicheskoy ordena Lenina bol'nitsy imeni S.P. Botkina.
(OTOSCLEROSIS, surgery)

NIKITINA, V. F.

Use of polyethylene in surgery on the stapes. Vest. otorin.
no.2:65-72 '62. (MIRA 15:2)

1. Iz Nauchno-issledovatel'skogo instituta bolezney ukha, nosa i
gorla (dir. - prof. N. A. Bobrovskiy) Ministerstva zdravookhraneniya
RSFSR, Moskva.

(ETHYLENE) (EAR--SURGERY)

NIKITINA, V.P.

Results of surgical treatment of hearing disorders in otosclerosis
by the method of interposition of the crura of stapes. Zhur. Res.
nos. 1 gor. bol. 24 no.111-17 JA-8 '64. (MIRA 18-3)

1. Gosudarstvennogo nauchno-issledovatel'skogo instituta kha-
gerla i nosa Ministerstva zdravookhraneniya RSFSR (dir.: prof.
N.A. Bobrovskiy).

BERDENNIKOVA, S.P.; ZHIRNOVA, N.N.; NOVIKOV, S.I.; KIROV, Ya.I.; SIKHUTINA, V.F.

Effectiveness of the use of the MAG aerosol generator. *Izv. vuzov. Khim. i tekhnol.*
otvred. i bol. 9 no.11:28-29 '64. (MIRA 18:2)

1. Institut khimicheskoy kinetiki i goreniya Sibirskoy akademii
AN SSSR.

NIKITINA, V. G.

~~Advanced training for pharmacy workers. Apt.delo 4 no.1:31 Ja-F~~
'55 (MLRA 8:4)

1. Upravlyayushchiy Chuvashskim otdeleniyem GAFU.
(PHARMACY,
in Russia, personnel efficiency)

IONIN, M.V.; NIKITINA, V.G.

Rate of hydrolysis of ferrous chloride in a water vapor - air medium. Zhur. prikl. khim. 33 no.12:2651-2657 D '60.

(MIRA 14:1)

1. Kafedra obshchey khimii Gor'kovskogo politekhnicheskogo instituta imeni A.A.Zhdanova.

(Iron chloride)

IONIN, M.V.; KOZHAKOVA, A.A.; NIKITINA, V.G.

Hydrolysis rate of ferrous chloride in a water vapor medium.
Zhur.prikl.khim. 35 no.4:900-902 Ap '62. (MIRA 15:4)

1. Kafedra obshchey khimii Gor'kovskogo politekhnicheskogo instituta.
(Iron chlorides) (Hydrolysis)

NIKITINA, V.I.

Houses for the creative intelligentsia. Gor.khoz.Mosk. 37 no.10:49-
50 O '63. (MIRA 17:2)

1. Instruktor otдела kul'tury Moskovskogo gorodskogo komiteta Kommunisticheskoy partii Sovetskogo Soyuza.

USSR/Chemistry - Alcohols Jan 49
Chemistry - Rearrangement, Allyl

"Allyl Rearrangements: Action of Alcoholic
Alkali on Butoxylchloropentene Isomers," A. N.
Padovik, V. I. Nikitina, Lab of Org Chem,
Kazan State U, 7 1/4 pp

"Zhur Obshch Khim" Vol XIX, No 1

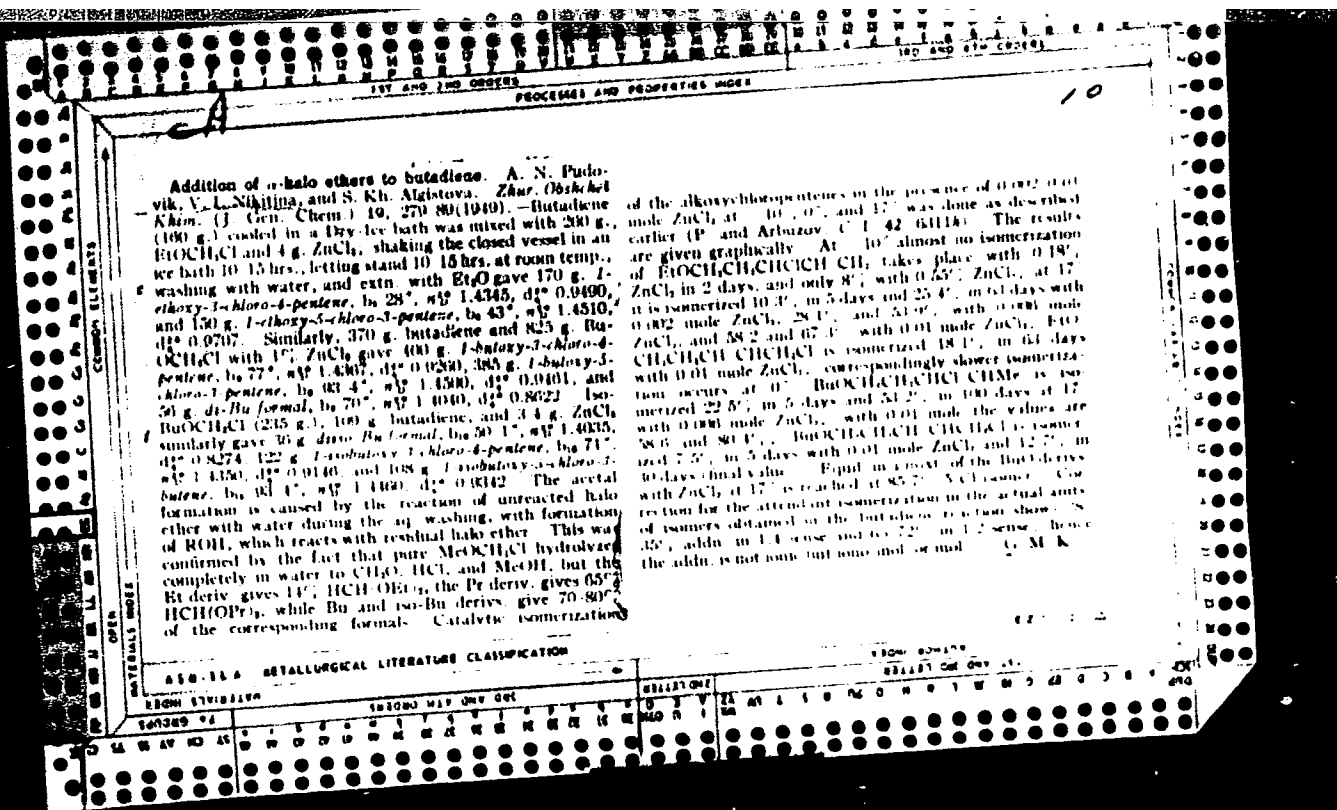
In methanol and ethanol solutions, potassium
hydroxide converts 1-butoxy-5-chloro-3-pentene
into corresponding ethers. In the case of
normal propyl, normal butyl, and tertiary
butyl alcohols 1-butoxy-2, 4-pentadiene and

58/49714

USSR/Chemistry - Alcohols (Contd) Jan 49

dibutoxypentene in yields of 5 - 17% were also
obtained. With tertiary butyl alcohol, forma-
tion of dibutoxypentene was principal reaction.
Mechanism of reactions involved is explained
by the drop in dissociation of alcohols used
into alkoxy groups and a proton. Submitted
22 Oct 47.

58/49714



NIKITINA, V. I.

Chemical Abst.
Vol. 48 No. 5
Mar. 10, 1954
Organic Chemistry

Chem. 12
Allyl rearrangements. XVI. Formation of acetates and
alcohols from isomeric butoxychloropentenes. A. N.
Pudovik and V. I. Nikitina. J. Gen. Chem. U.S.S.R. 22,
1421-3 (1952) (Engl. translation).—See C.A. 47, 48426.
H. L. H.

NIKITINA, V. I.

232T22

USSR/Chemistry - Organomagnesium Com- Sep 52
pounds

"Allyl Rearrangements. XVII. The Reactions
Between Organomagnesium Compounds and Isomeric
Methoxychloropentenes," A. N. Pudovik, V. I.
Nikitina, Lab of Org Chem, Kazan' State U
lment V. I. Ul'yanov-Lenin

"Zhur Obsch Khim," Vol 22, No 9, pp 1553-1559

The reactions between isomeric methoxychloro-
pentenes and benzyl magnesium chloride (I),
ethyl Mg bromide (II), and butyl Mg bromide (III)
were studied. When (I) reacts with isomeric

232T22

methoxychloropentenes, mixts of isomeric me-
thoxybenzylpentenes of identical compn are
formed. This reaction proceeds by an ionic
mechanism. As a result of the action of (II) and
(III) on isomeric methoxychloropentenes, mixts
of the corresponding 1-methoxy-5-alkylpentene-3
and 1-methoxy-6-beta-methoxyalkyloctadiene-3,7
compds are formed. The latter product also
forms as a result of the direct action of mag-
nesium on isomeric methoxychloropentenes.

232T22

5(3)

SOV/79-29-4-38/77

AUTHORS:

Nikitina, V. I., Pudovik, A. N.

TITLE:

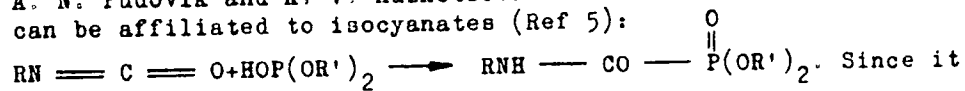
A New Method for the Synthesis of Phosphinates and Thiophosphinates (Novyy metod sinteza efirov fosfinovykh i tiofosfinovykh kislot). XXX. On the Reaction of Dialkyl Phosphorous and Dialkyl Thiophosphorous Acids With Ketene (XXX. O vzaimodeystvii dialkilfosforistykh i dialkiltiofosforistykh kislot s ketenom)

PERIODICAL:

Zhurnal obshchey khimii, 1959, Vol 29, Nr 4, pp 1219-1222 (USSR)

ABSTRACT:

A. N. Pudovik and A. V. Kuznetsova showed that the above acids can be affiliated to isocyanates (Ref 5):



Since it is known that ketene and its homologues are greatly reactive and are easily affiliated to various compounds, the authors tried to cause ketene to react as well. When carrying out the reactions of dialkyl phosphorous acids with ketene they found that these reactions require a catalyst, and that it is necessary to add to the reaction mixture a small quantity of pyridine or sulfuric acid in order to initiate the reaction. During the transformation of ketene with dimethyl-, diethyl-, dibutyl-, and di-isobutyl

Card 1/3

SOV/79-29-4-38/77

A New Method for the Synthesis of Phosphinates and Thiophosphinates. XXX. On the
Reaction of Dialkyl Phosphorous and Dialkyl Thiophosphorous Acids With
Ketene

phosphorous acids two products form in either case: dialkyl acetophosphinates, and products of their further transformation with ketene (Scheme 2). Generally the quantity of both products is 75-80%; the acetophosphinate yield is only a fraction of the acetoxyvinylphosphinate yield. The structure of acetophosphinates was determined according to reference 6, that of acetoxyvinylphosphinates by means of the double bond. Formaldehyde results from the ozonation of the acetate of dimethyloxyvinylphosphinate. The second stage of the reaction was carried out separately. By the transformation of ethylacetophosphinate with ketene in the presence of pyridine the diethylacetoxyvinylphosphinate was obtained. The data obtained, as well as those obtained by the analyses and molecular refraction, prove the structure of the acetates of oxyvinylphosphinates. The constants of acetophosphinates and acetovinylphosphinates are contained in the table (Products 1-8). The reactions of ketene with dialkylthiophosphorous acids take place in a similar way, but the acetoxyvinylthiophosphinate yields are smaller in these reactions than in those mentioned

Card 2/3

SOV/79-29-4-38/77

A New Method for the Synthesis of Phosphinates and Thiophosphinates. XXX. On the Reaction of Dialkyl Phosphorous and Dialkyl Thiophosphorous Acids With Ketene

above. The constants of acetoxyvinylthiophosphinates are contained in the table as well (Products 9-11). The reactions follow scheme 3. The investigations of the same problem carried out by I. Kennedy, Meaburn (Ref 7) became known to the authors only after the end of their work. The results of the present investigation are more detailed than those furnished by the authors referred to. There are 1 table and 7 references, 6 of which are Soviet.

ASSOCIATION: Kazanskiy gosudarstvennyy universitet (Kazan' State University)

SUBMITTED: February 28, 1958

Card 3/3

S/062/60/000/006/021/025/XX
B020/B060

AUTHORS: Arbuzov, B. A. and Nikitina, V. I.
TITLE: Addition of Carbon Tetrachloride to Divinyl and Piperylene
PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk,
1960, No. 6, pp. 1131-1133

TEXT: Carbon tetrachloride has been earlier found to be added to olefins under the action of peroxide catalysts or ultraviolet light. The authors carried out experiments with the addition of carbon tetrachloride to divinyl and piperylene in the presence of benzoyl peroxide. Butadiene was heated with CCl_4 in the autoclave to $120 - 130^\circ$, which resulted in an appreciable resin formation. Three principal products and a small amount of a further product of composition $C_5H_4Cl_2$ were found, the last mentioned being formed by the separation of two HCl molecules from the addition product CCl_4 - butadiene. The principal products are 1,1,1,5-tetrachloro pentene-3 and 1,1,1,9-tetrachloro nonadiene-3,7, the latter of which was proved. 1-chloro-4-methyl-5,5,5-trichloro pentene-2

ACCESSION NR. AT4033991

S/0000/63/000/000/0087/0090

AUTHOR: Nikitina, V. I.; Maklakov, A. I.; Balakireva, R. S.;
Pudovik, A. N.

TITLE: Polymers consisting of aromatic rings conjugated with hetero
atoms. I. Polyphenylene- and polydiphenyleneimines.

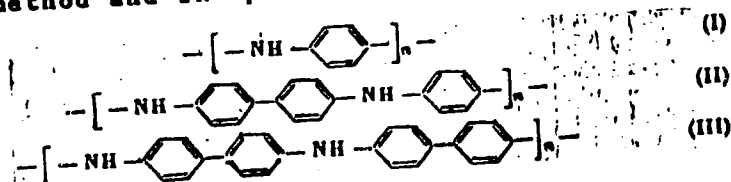
SOURCE: Geterotsepnnyye vy*sokomolekulyarnyye soyedineniya
(Heterochain macromolecular compounds); sbornik statey. Moscow,
Izd-vo "Nauka," 1963, 87-90

TOPIC TAGS: organic semiconductor, semiconducting polymer, poly-
phenyleneimine, polydiphenyleneimine, polymer electrical property

ABSTRACT: Polyphenyleneimines, semiconducting polymers containing
NH groups between aromatic rings in the backbone, have been prepared,
and their electrical and magnetic properties have been studied at the
Kazanskiy gosudarstvennyy universitet im. V. I. Ul'yanov-Lenina
(Kazan' State University). Polycondensation of aromatic diamines with
phenols was used. Polymer I was obtained from p-phenylene-
diamine and hydroquinone;

ACCESSION NR. AT4033991

and III, from benzidine and 4,4'-dihydroxybiphenyl. The polycondensation was carried out in the melt at 260—280C for 6 hr, and then at the same temperature and 1—2 mm Hg for 2 hr. All the polymers are black powders insoluble in the common organic solvents except dimethylformamide. Three types of polymers were prepared: reprecipitated (a), nonreprecipitated (b), and reprecipitated and heat-treated in air at 320C for 1 hr (c). On the basis of the synthesis method and IR spectroscopy, the following structures were



assumed. D-c electrical conductivity was determined for pellet samples at 20—100C. The temperature dependence of conductivity obeyed an exponential law fairly well. Numerical data are given in Table 1 of the Enclosure. All the samples exhibited high conductivity, susceptibility, and an EPR signal. The unpaired

ACCESSION NR. AT4033991

electron concentration in Ia was calculated to be about 10^{19} — 10^{20}
per gram. Orig. art. has: 2 tables, 1 figure, and 1 formula.

ASSOCIATION: Kazanskiy gosudarstvennyy universitet im. V. I.
Ul'yanova-Lenina (Kazan' State University)

SUBMITTED: 09Jul62

DATE ACQ: 30Apr64

ENCL: 01

SUB CODE: CH,PH

NO REF SOV: 010

OTHER: 000

ENCLOSURE: 01

ACCESSION NR: AT4033991

Table 1. Electrical and magnetic properties of polyphenyleneimines

Polymer	Sample	$\rho_{20}, \text{ohm-cm}^{-1}$	$\rho_{20}, \text{ohm-cm}^{-1}$	E, ev	EPR line half width, gauss	Polymer	Sample	$\rho_{20}, \text{ohm-cm}^{-1}$	$\rho_{20}, \text{ohm-cm}^{-1}$	E, ev	EPR line half width, gauss
I	a	10^{-9}	10^{-14}	0.48	27	II	a	10^{-9}	10^{-3}	0.68	29
	b	10^{-10}	10^{-14}	0.60			b	10^{-12}	10^{-5}	0.86	
	c	10^{-11}	10^{-6}	0.68			a	10^{-10}	10^{-6}	0.50	
III	a					III	a				
	b						b				
	c						c				

PUDOVIK, A.N.; GOZMAN, I.P.; SERIINA, V.I.

Interaction of ketene with esters of α -hydroxy- and α -amino-
phosphinic acids. Zhur.ob.khim. 33 no.10:3201-3205 0 '63.
(MIRA 16:11)

L 53586-65 EWT(m)/EWP(j) Pc-4 RM

ACCESSION NR: AP5016305

UR/0190/64/006/012/2145/2148

AUTHOR: Nikitina, V. I.; Izmaylova, M. I.; Kurguzova, A. M.; Pudovik, A. N.

TITLE: Reactions of nucleophilic addition to unsaturated polyesters

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 6, no. 12, 1964, 2145-2148

TOPIC TAGS: polyester plastic, macromolecular chemistry

Abstract: Polyesters produced on the basis of maleic anhydride and diethylene glycol, with molecular weights from 800 to 3,000, were investigated in nucleophilic addition reactions. Dialkylphosphorous acids, containing from two to seven carbon atoms in the ester radicals, diethylphosphoneacetic ester, and diethylphosphoneacetone, as well as ammonia and amines (diethylamine and aniline) and malonic, acetoacetic, and cyanoacetic esters were added to the unsaturated polyesters. It was found that these reagents can add to polydiethylene glycol fumarate in the presence of alkali metal alcoholates, and in certain cases (amines) in the absence of catalysts as well. The properties of the resultant products were investigated. It was also shown that electrophilic reagents, in particular,

L 53586-65

ACCESSION NR: AP5016305

chloride, can be added to unsaturated polyesters; and addition product corresponding to polydiethylene glycol dichlorosuccinate was obtained when fluorine was passed through a cooled chloroform solution of polydiethylene glycol fumarate with molecular weight 894. Orig. art. has 2 formulas and 3 tables.

ASSOCIATION: Kazanskiy gosudarstvennyy universitet im. V. I. Ul'yanova-Lenina
(Kazan State University)

SUBMITTED: 29 Jan 64

ENCL: 00

SUB CODE: MT, CC

NO REF SOV: 001

OTHER: 001

JPRS

L 29569-66 EAP(3)/EMI(m) LJP RM

ACC NR: AP6619536

SOURCE CODE: UR/0190/66/008/006/1007/1011

AUTHOR: Margulov, A. I.; Margulov, I. I.; Shamkina, G. G.; Nikitina, V. I.; Bezzubov, V. M.

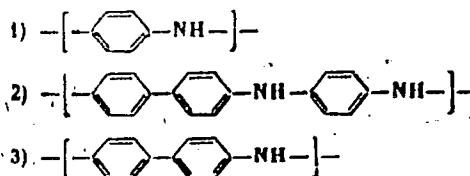
ORG: Kazan State University, Kazanskiy gosudarstvennyy universitet); Institute of Organic Chemistry, AN SSSR, Kazan (Institut organicheskoy khimii AN SSSR)

TITLE: Semiconductor properties of polymers containing benzene rings and heteroatoms in the backbone

SOURCE: Vysokomolekulyarnyye soedineniya, v. 8, no. 6, 1966, 1007-1011

TOPIC TAGS: semiconducting polymer, benzene ring, imino group, degassing

ABSTRACT: A study has been made of the effect of preliminary degassing on the electrical properties of polymers containing benzene rings and NH-groups in the backbone. Polymers with the following repeat units were prepared:



ACC NR: AP6019616 (A.N.) SOURCE CODE: UR/0048/66/030/002/0255/0256
 AUTHOR: Gridnev, K.A.; Krasnov, L.V.; Kukhtina, I.K.; Luk'yanov, V.K.; Nikitina, V.I.;
 Furman, V.I.

ORG: none

TITLE: Calculation of direct nuclear reactions by the distorted wave method/Report
 Fifteenth Annual Conference on Nuclear Spectroscopy and Nuclear Structure, held at
 Minsk, 25 January to 2 February 1965/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 30, no. 2, 1966, 255-256

TOPIC TAGS: nuclear reaction, mathematic method, ~~direct nuclear reaction, nuclear~~
~~stripping reaction, distorted wave approximation~~, wave analyzer

ABSTRACT: The authors have employed an electronic computer to calculate differential cross sections for (d,p) reactions in the distorted wave approximation under the following simplifying assumptions: 1) the range of the nuclear forces is zero (the interaction potential is a delta-function) and 2) there is no spin-orbital coupling. The calculated angular distribution of protons from the $^{56}\text{Fe}(d,p)^{57}\text{Fe}$ reaction with an incident deuteron energy of 0.6 MeV is compared with the angular distribution calculated in the plane wave approximation (Butler's theory) and with experimental data of V.P. Bochin, K.I. Zhrebtsova, V.S. Zelotarev, V.A. Komarov, L.V. Krasnov.

ACC NR: AP6019610

V.P. Litvin, Ya.A. Nemilov, and B.G. Gorkhsly (Vestn. Leningr. univ., 1971, 15, 1, 107-110).
The experimental data are in good agreement with the calculations. The authors intend to provide a more
detailed description of their calculations and expect to relax the simplifying assumptions 1) and 2) in future work. Orig. art. has: 2 formulas and 1 figure.

SUB CODE: 20

SUBM DATE: 00

ORIG. REF: 001

OTH REF: 002

ACC NR: AP6025987

SOURCE CODE: UR/0079/66/036/007/1232/1236

AUTHOR: Pudovik, A. N.; Yastrebova, G. Ye.; Nikitina, V. I.

ORG: Kazan State University (Kazanskiy gosudarstvennyy universitet)

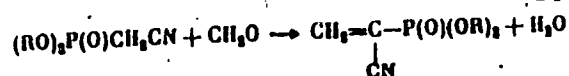
TITLE: Esters of α -cyanovinylphosphonic acid

SOURCE: Zhurnal obshchey khimii, v. 36, no. 7, 1966, 1232-1236

TOPIC TAGS: alkyl cyanovinylphosphonate, diethyl cyanovinylphosphonate, dibutyl cyanovinylphosphonate, *ester, mercaptan, organic phosphorus compound*

ABSTRACT:

Diethyl α -cyanovinylphosphonate (I) and di-n-butyl α -cyanovinylphosphonate (II) were obtained by the condensation of formaldehyde with diethyl and di-n-butyl phosphonoacetonitriles in the presence of piperidine in methanol:



ACC NR: AP6025987

Table 1.

Compound	Yield (%)	bp (° mm Hg)	d_4^{20}	n_D^{20}	IR		Found XP	Formula	Calculated XP
					Found	Calculated			
I $\text{CH}_3\text{-(C(CN)P(O)(OC}_2\text{H}_5)_2$	21	82-83° (1)	1.1040	1.4420	45.81	44.74	18.85	$\text{C}_7\text{H}_{15}\text{NO}_5\text{P}$	18.40
II $\text{CH}_3\text{-(C(CN)P(O)(OC}_2\text{H}_5)_2\text{-NH}_2$	25	96-98 (0.05) 110-109 (1)	1.0176	1.4450	63.72	63.22	13.20	$\text{C}_{11}\text{H}_{20}\text{NO}_5\text{P}$	13.65
III $(\text{C}_2\text{H}_5\text{O})_2\text{P(O)CH(CN)CH}_2\text{P(O)(OC}_2\text{H}_5)_2$	18.2	173-174 (2)	1.1706	1.4508	75.08	74.55	18.11	$\text{C}_{17}\text{H}_{30}\text{NO}_8\text{P}_2$	18.86
IV $(\text{C}_2\text{H}_5\text{O})_2\text{P(O)CH(CN)CH}_2\text{P(O)(OC}_2\text{H}_5)_2\text{-NH}_2$	50.5	175-176 (0.07)	1.1328	1.4503	84.05	83.78	17.86	$\text{C}_{19}\text{H}_{32}\text{NO}_8\text{P}_2$	17.44
V $(\text{C}_2\text{H}_5\text{O})_2\text{P(O)CH(CN)CH}_2\text{SCOC}_2\text{H}_5$	54	133-135 (0.04)	1.1811	1.4725	82.84	82.33	11.82	$\text{C}_9\text{H}_{18}\text{NO}_5\text{PS}$	11.60
VI $(\text{C}_2\text{H}_5\text{O})_2\text{P(O)CH(CN)CH}_2\text{SC}_2\text{H}_5$	48.5	118-119 (0.04)	1.1258	1.4732	82.58	82.32	12.57	$\text{C}_8\text{H}_{16}\text{NO}_5\text{PS}$	12.25
VII $(\text{N-C}_2\text{H}_5\text{O})_2\text{P(O)CH(CN)CH}_2\text{P(O)(OC}_2\text{H}_5)_2$	75	165-168 (0.08)	1.1060	1.4500	83.07	83.03	16.02	$\text{C}_{20}\text{H}_{38}\text{NO}_8\text{P}_2$	16.16
VIII $(\text{N-C}_2\text{H}_5\text{O})_2\text{P(O)CH}_2\text{CN}$	54	155-156 (8)	1.0350	1.4392	59.24	59.04	19.10	$\text{C}_{10}\text{H}_{18}\text{NO}_5\text{P}$	19.30
IX $(\text{C}_2\text{H}_5\text{O})_2\text{P(O)CH(CN)CH}_2\text{P(O)}\begin{matrix} \text{C}_2\text{H}_5 \\ \text{OC}_2\text{H}_5 \end{matrix}$	81.8	168-170 (0.08)	1.1580	1.4620	79.86	72.81	19.84	$\text{C}_{11}\text{H}_{20}\text{NO}_5\text{P}_2$	19.83

ACC NR: AP6025987

The addition of dialkylphosphorous acids, ethyl ethylphosphinates, ~~thiophosphates~~,
and ethyl mercaptan to I and II gave the corresponding esters shown in the
table. Orig. art. has: 1 table. [W.A. 50; CBE No. 10]

SUB CODE: 07/ SUBM DATE: 10May65/ ORIG REF: 004/ OTH REF:00

NIKITINA, V.K.

Cancer of the lower portion of the pharynx as revealed by data
from the Institute of Oncology of the Academy of Medical Sciences
of the U.S.S.R. Zhur. ush., nos. i gorl. bol. 20 no. 3:26-31
My-Je '60. (MIRA 14:4)

1. Iz otorinolaringologicheskoy kliniki (zav. - prof. N.A. Karpov)
Instituta onkologii AMN SSSR.
(PHARYNX—CANCER)

NIKITINA, V. K.

1600

2

✓ The anodic behavior and potentials of gold-platinum alloys. M. A. Kloenko and V. K. Nikitina. *Izv. Akad. Nauk S.S.R. Ser. Fiz.-Khim. Nauk*, 1955, No. 1, 107-110. The anodic soln., the e.m.f., and the electrode potentials of the Au-Pt system were studied over the whole concn. range and in the annealed as well as quenched states. The nature of the compn. potential curve in the annealed and the quenched states was analogous, and it was deul. by the extent of regions of the existence of solid solus. with a limited mutual soly. The straight-line section of the curve decreased with rise in temp., because of the reduction in the heterogeneous range. In the annealed samples, the solid soln. in Au was the 1st to dissolve. The dissolved part of the alloys in the heterogeneous range had the compn. of the dissolving soln. in Au, or 76% Au and 24% Pt. W. M. S.

GR

NIKITINA, V.K.

The anodic solution and potentials of the platinum-
copper alloys: M. K. Kiselev and V. K. Nikitina. *Izv. Akad. Nauk SSSR, Ser. Khim. Nauk*, 1965, No. 1, p. 100. (Chem. Abstr. 60:10000).
The electrode potentials, e.m.f., anodic β and the polarization curves of the Pt-Cu alloy system were investigated over the whole range of concns., both in the annealed and quenched states. The nature of changes in the compn. potential curves (in 5N HCl soln.) and the e.m.f. (in 1N CuSO₄ soln.) depended strongly on the existence of trans. formations in the solid state, connected with the formation of compnts. from a continuous series of solid solns. Deep min. found on curves for quenched alloys, corresponded to the compnts. Pt₃Cu and Pt₅Cu. This was due to the fact that alloys of these compnts. were the furthest removed from the equil. state, and therefore had a max. free energy in comparison with the annealed alloys of the same compn., which were true chem. compnts. The difference in the electrode potentials in the quenched and annealed states of the Pt-Cu compd. in 5N HCl reached 500 mv. The nature of anodic soln. was not affected by the thermal treatment. Under the influence of the elec. current, in alloys contg. 0-25% Pt, Cu primarily entered the soln. In the middle part of the diagram, with a Pt content between 20 and 60%, the dissolved anode had the compn. of the alloy. Alloys with 60-100% Pt were almost insol. The electrode potential measurements permitted the detection of chem. compnts. formed in continuous series of solid solns. at lower temps. and not only on annealed samples but equally clearly on quenched samples.
W. M. S.

PM

NIKITINA, V. K.

NIKITINA, V. K.: "A study of the gold-platinum-copper system using methods of physicochemical analysis." Inst of General and Inorganic Chemistry imeni N. S. Kurnakov, Acad Sci USSR. Moscow, 1956. (Dissertation for the Degree of Candidate in Chemical Sciences).

SO: Knizhaya Isotopis', No 23 1956

Distr: 4E4J/4E2c

27 47
/Electrochemical behavior of gold-copper alloys. M. A. Kiochko and V. K. Nikulina. Zhur. Neorg. Khim. 2, 2508-2509 (1967); ch. 2, 30, 90088. — The electrode potential E , e.m.f., anodic soly., and the polarization curves of Au-Cu alloys water quenched from 800° and others cooled at the rate of 100°/day to 400° and held at this temp. 8 days, were detd. The E vs. compn. curves in 5N HCl and the e.m.f. vs. compn. curves in N CuSO₄ showed deep min. which in quenched alloys were attributed to higher free energies compared with those in annealed alloys. These min. corresponded to the compns. of the compds. AuCu, Au₂Cu, AuCu₃, and Au₃Cu. In alloys contg. from 0 to 30 at. % Au, the Cu dissolved preferentially. Only Cu dissolved from AuCu₃. With alloys contg. from 40 to 80% Au, the proportion of Cu in the soln. was twice that in the initial alloy. In alloys contg. from 60 to 100% Au, the compn. of the soln. approached that of the alloys. I. Bencowitz.

4
2

Jan

L 15209-66 ENT(m)/EWP(w)/EPF(n)-2/T/EWP(t)/EWP(b) LJP(s) JD/W/JG
ACC NR: AP6001296 SOURCE CODE: UR/0363/65/001/008/1311/1319

AUTHOR: Nikitina, V. K.; Lobanova, Yu. K.

ORG: Institute of General and Inorganic Chemistry im. N. S. Kurnakov, Academy of Sciences SSSR (Institut obshchey i neorganicheskoy khimii Akademii nauk SSSR)

TITLE: Study of the interaction of bismuth and sulfur

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 8, 1965, 1311-1319

TOPIC TAGS: bismuth alloy, sulfur alloy, bismuth compound, sulfur compound

ABSTRACT: A series of sulfur-bismuth alloys containing from 0 to 60 at.% S was studied by the following methods: differential thermal analysis, microstructural analysis, and measurements of hardness, microhardness, and electrical resistivity. All the properties were measured on samples annealed for 650 hr at 220C, and the resistivity was determined on cast polycrystalline samples. Thermal analysis showed that the interaction of molten sulfur and bismuth at 280C involves an exothermic reaction which forms the chemical compound Bi_2S_3 in all alloys. The phase diagram plotted from the data obtained belongs to the eutectic type with a strongly degenerate eutectic, this being very characteristic of systems having a semiconductor as one component. Microhardness data indicate that bismuth and bismuth sulfide are mutually insoluble. The hardness and electrical resistivity of the eutectic systems change symbatically in accordance with Kurnakov's rules. It is concluded that only one chemical compound Bi_2S_3 having a congruent melting point (779C) and semiconducting properties,

L 15209-66

ACC NR: AP6001296

is formed in the interaction of bismuth and sulfur. Orig. art. has: 11 figures and 2 tables.

SUB CODE: 07,11 / SUBM DATE: 24Mar65 / ORIG REF: 005 / OTH REF: 020

NIKOL'SKAYA, G.F.; NIKITINA, V.K.; YEVFIMOVSKIY, I.V.; LOBANOVA, Yu.K.

Alloys of the system gold - antimony in the solid and liquid states. Izv. AN SSSR. Neorg. mat. 1 no.10:1826-1833 0 '65.
(MIRA 18:12)

1. Institut obshchey i neorganicheskoy khimii imeni N.S.
Kurnakova AN SSSR. Submitted April 27, 1965.

ACC NR: AP7008525

SOURCE CODE: UR/0363/67/003/007/0311/0314

AUTHOR: Nikitina, V. K.; Eabitsyna, A. A.; Lobanova, Yu. K.

ORG: Institute of General and Inorganic Chemistry im. M. S. Kurnakov, Academy of Sciences, SSSR (Institut obshchey i neorganicheskoy khimii Akademii nauk SSSR)

TITLE: Reaction of indium antimonide with AuIn_2

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 3, no. 2, 1967, 311-314

TOPIC TAGS: indium compound, antimonide, gold compound, alloy phase diagram

ABSTRACT: Since, to the authors' knowledge, no one has ever studied the reaction of compounds having a sphalerite-type lattice with fluorite-type compounds, they undertook a study of the quasi-binary section $\text{InSb} - \text{AuIn}_2$ of the ternary system indium - antimony - gold, using differential thermal analysis (heating curves) and microstructural and x-ray phase analyses. The samples were prepared by zone leveling. A diagram of the quasi-binary section is shown in Fig. 1. A region of solid solutions from pure indium antimonide to an alloy with 10 mole % AuIn_2 was obtained by zone leveling. Solid solutions with AuIn_2 as the base were obtained by adding 5 mole % of InSb . It is thus shown that it is fundamentally possible to obtain solid solutions by reacting compounds with sphalerite and fluorite lattices. Orig. art. has: 3 figures and 2 tables.

ACC NR: AP7008525

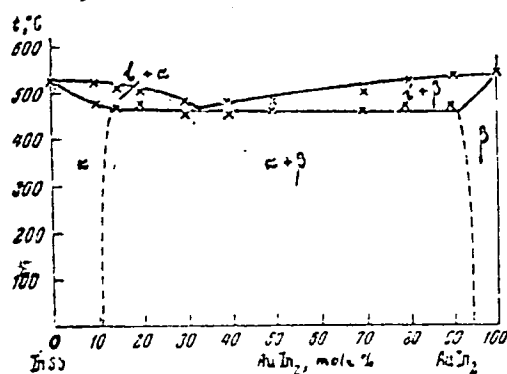


Fig. 1. Phase diagram of the quasi-binary section InSb - AuIn₂ of the ternary system indium - antimony - gold

SUB CODE: 07/ SUEM DATE: 01Apr66/ ORIG REF: 003/ OTH REF: 010

NIKITINA, V. K.

"Fodder Types of Rye in Leningradskaya Oblast." Cand Agr Sci, Leningrad Agricultural Inst, Min Higher Education, Leningrad, 1955. (KL, No 16, Apr 55)

SO. Sum. No. 704. 2 Nov 55 - Survey of Scientific and Technical Dissertations Defended

NIKITINA, V M

РАДИОЛЫЗ РАДИЧНЫХ ТИПОВ УГЛЕВОДОК
В. М. НИКИТИНА, К. Е. ЛЕВЧЕНКО, А. А. ВОЗНУХОВ, В. М. ВОЗНУХОВ

VIII Mendeleev Congress for General and Applied Chemistry in
Section of Chemistry and Chemical Technology of Fuels,
publ. by Acad. Sci. USSR, Moscow 1979

abstracts of reports scheduled to be presented at above mentioned congress,
Moscow, 15 March 1979.

S/844/62/000/000/061/129
D204/D307

AUTHORS: Khmel'nitskiy, Yu. L., Melekhonova, I. I., Nesterovskiy,
V. V. and Nikitina, V. M.

TITLE: Radiational oxidation of paraffin and other hydrocarbons

SOURCE: Trudy II Vsesoyuznogo soveshchaniya po radiatsionnoy khimii. Ed. by L. S. Polak. Moscow, Izd-vo AN SSSR, 1962, 362-366

TEXT: The aerial oxidation of γ irradiated technical paraffin was studied in continuation of earlier work. At 150°C, with irradiation of 0 - 350 r/sec (over 3-hr periods), it was found that the rate of reaction increased with increasing dose of γ rays. The overall reaction time was 11 hours. The extent of oxidation (as assessed by the acid number) rose with increasing temperature to a gentle maximum at 150°C for paraffin through which air was bubbled, and which was irradiated at 215 - 455 r/sec; above 150°C other oxidation products formed in preference to acids. A similar phenomenon was observed for the alcohols. The extent of oxidation was greatly increased in

NIKITINA, V.M., kand.sel'skokhoz. nauk

Select the variety. Zamladelie 25 no.12:40-41 D '63.
(MIRA 17:4)

1. Plodoovoshchnyy institut imeni I.V.Michurina.

ETERLEY, Nikolay Senenovich; NIKITINA, V.M., red.

[Transformers and electrical machinery] Transformatory i
elektricheskie mashiny. Izd.2., perer. Moskva, Izd-vo
"Kolos," 1964. 278 p. (MIRA 17:6)

LOTOTSKIY, Konstantin Vasilyevich; NIKHINA, V.M., red.

[Electrical machines and the principles of electric drives] Elektricheskie mashiny i osnovy elektroprivoda. Moskva, Izd-vo "Kutep", 1964. 494 p. (MIRA 17:5)

ZUL', Nikolay Mikhaylovich, kand. tekhn. nauk; POYARKOV, Kirill
Mikhaylovich, kand. tekhn. nauk; YESIPOVICH, N.M., red.;
NIKITINA, V.M., red.

[Automation of rural electric power supply] Avtomatizatsiia
sel'skogo elektrosnabzheniia. Moskva, Kolos, 1965. 287 p.
(MIRA 18:3)

ACC NR: AP6032045

SOURCE CODE: UR/0145/66/000/005/0017/0023

AUTHOR: Shubin, V. P. (Lecturer); Nikitina, V. M. (Assistant)

ORG: Kuybyshev Aviation Institute (Kuybyshevskiy aviatsionnyy institut)

TITLE: Determining tangential and normal elasticity moduli and Poisson's ratio of bearing plastics made from polyamides and their variants

SOURCE: IVUZ. Mashinostroyeniye, no. 5, 1966, 17-23

TOPIC TAGS: elastic modulus, elasticity, Poisson coefficient, polyamide, bearing material

ABSTRACT: A method is given for determining Poisson's ratio and the tangential modulus of elasticity for pure polyamide plastics and their derivatives. The unit for testing the specimens for microtorsion and microshear is described. Average values are obtained for the normal and tangential elastic moduli and Poisson's ratios for a series of polyamide plastics used for bearing material. The microdeformation method may be used to minimize the effect of cold creep in plastics under load. This is the reason the values for E , G and μ in the first approximation are close to the natural values. The authors were unable to make a comparison of their results since there is no technical information published on the values of Poisson's ratio or tangential and normal elastic moduli, Orig. art. has: 4 figures, 4 tables, 10 formulas.

SUB CODE: 11, 13/ SUBM DATE: 11Nov63

UDC: 621.822/678.5

SHUBIN, V.P., dotsent; NIKITINA, V.N., assistant.

Hardness of some bearing plastics and its relationship with
ultimate strength in stretching. Izv.vys.ucheb.zav.; mashinostr.
no.7:62-65 '63. (MIRA 16:11)

1. Kuybyshevskiy aviatsionnyy institut.

15187-66 EWT(d)/EWT(m)/EWP(w)/EWP(f)/EWP(c)/EWP(v)/T/EWP(k)/EWP(h)/EWP(l)/ETC(m)-6
 ACC NR: AT6001710 IJP(c) WW/EM/GS SOURCE CODE: UR/0000/65/000/000/0304/0317
 AUTHORS: Terekhova, K. S.; Nikitina, V. N.
 ORG: none
 TITLE: Industrial testing and calibration of balancing machines for precision devices
 SOURCE: Uravnoveshivaniye mashin i priborov (Balancing of machinery and instruments).
 Moscow, Izd-vo Mashinostroyeniye, 1965, 304-317
 TOPIC TAGS: balancing machine, rotor balancing, instrument calibration equipment,
 vibration damping, turbine rotor
 ABSTRACT: Since the accuracy of balancing of precision rotors depends on the accuracy
 of the balancing machine, the testing and calibration procedures for balancing machines
 are qualitatively discussed. Great care must be taken in the preparation of at least
 four types of calibration rotors: one rotor each of minimum and maximum weight mounted
 in a balancing frame; one rotor each of minimum and maximum weight assembled in their
 supports and mounted in a balancing frame. Equally spaced threaded holes (4 or 8)
 should be provided in each balancing plane for precisely weighed (0.1 mg) calibration
 weights. The following tests should be performed and their results recorded in the
 machine manual (each is briefly and qualitatively discussed): a) decoupling of mutual
 effects of balancing planes (1/30 attenuation is considered satisfactory); b) scale
 division and discrepancy of the two supports over full range of unbalances;

L 15187-66

ACC NR: AT6001710

c) sensitivity threshold; d) resolution (at least between g and $1.2 g$ where g = permissible unbalance); e) linearity of scale (at least 5% of maximum reading over full range); f) angular location of unbalance (must be accurate to $\pm 3^\circ$); g) filter effectiveness of tuned amplifiers (measure: $Q = 2(f_0 - f)/f_0$ where f = frequency corresponding to 0.707 of resonance amplitude; $Q = 20--30$ is acceptable); h) amplitude-frequency response of tuned amplifiers; i) amplitude-frequency response of mechanical system; j) damping of mechanical system; k) stability and repeatability of readings; l) effects of power variations; m) rotor drive range and stability. It is suggested that the machine be recalibrated for each new rotor configuration tested and that all calibration results must be recorded and certified. Orig. art. has: 3 tables.

SUB CODE: 13/ SUBM DATE: 04Sep65/ ORIG REF: 003/ OTH REF: 004

turbine rotor

23,44,55

NIKITINA, V. N.

PA 243T99

USSR/Physics - Magnetization Oct 52

"Problem of Magnetization of a Cylindrical Rod With Winding," V.N. Nikitina, Chair of Math Phy Moscow State U

"Vest Moskov U, Ser Fiz-Mat i Yest Nauk" No 7, pp 51-62

Discusses work conducted in 1948 at the Physics Faculty, Moscow State U. States that problem is of immediate value in connection with the theory of ballistic method of measuring magnetic fields. Purpose is to solve the problem, taking into account the action of the current flowing in the winding on the field within the core

243T99

which action is omitted in previous studies, and to introduce corrections in usual calculations. Thanks A. N. Tikhonov, who posed the problem, and Ye. I. Kondorskii, who gave advice during the computations. Discusses setting up of the problem and derivation of boundary conditions, the simplified solution of $\vec{H}(\vec{r}, t)$, the complete solution of $h(r, t)$, the analytical formulas for the roots of the equation $J_0(x) - b \times J_1(x) = 0$, and calculated characteristics of iron, alnico, and alsiifer. Submitted 4 Feb 52.

243T99

NIKITINA, V. N.

Geomagnetism

Dissertation: "Anomalous Variable Electromagnetic Fields over cylindrical heterogeneities." Cand Phys-Math Sci, Geophysics Inst, Department of Physicomathematical Sciences, Acad Sci USSR, Oct-Dec 1953. (Vestnik Akademii Nauk, Mar 54).

SO: SUM 213, 20 Sep 1954

112-57-7-139 38

Translation from: Referativnyy zhurnal, Elektrotehnika, 1957, Nr 7, p 14 (USSR)

AUTHOR: Nikitina, V.N.

TITLE: On Anomalies of Alternating Electromagnetic Fields Over Cylindrical Inhomogeneities (Ob anomal'yakh peremennykh elektromagnitnykh poley nad tsilindricheskimi neodnorodnostyami)

PERIODICAL: Tr. Geofiz. in-ta AN SSSR (Transactions of the Geophysical Institute, AS USSR), 1956, Nr 32 (159), pp 62 - 93

ABSTRACT: A plane problem is considered of a fraction of an alternating electromagnetic field over a cylindrical enclave (a good conductor) embedded in a conducting semispace (earth). The vector potential of the field anomalous section is presented in terms of a source function by means of a distribution function of linear induction currents. High-conductivity of an ore body is allowed for as the Leontovich boundary conditions. The whole problem is reduced to an integral equation which can be satisfied with the distribution function. Examination and solution of the fundamental integral equation is conducted to its end for the case of a buried, perfectly conducting slanted bed. The results obtained can be

112-57-7-13938

On Anomalies of Alternating Electromagnetic Fields Over Cylindrical
used in prospecting for ore by electric alternating fields. Bibliography: 12
items. From the author's summary.

Card 2/2

IVANOV, A.P. (Moskva); NIKITINA, V.N. (Moskva); ENENSHTEYN, B.S. (Moskva)

Calculation of the current wave form in the load of a real inverter. Izv. AN SSSR. Otd. tekhn. nauk. Energ. i avtom. no.6:191-195
N-D '59. (MIRA13:8)

(Electric current converters)

8/049/60/000/03/017/019
E131/E691

AUTHOR: Nikitina, V.N. ✓

TITLE: Calculation of the Alternating Electromagnetic Field Above an Inclined Seam

PERIODICAL: *Izvestiya Akademii nauk SSSR, Seriya geofizicheskaya*, 1960, Nr 3, pp 495-506 (USSR)

ABSTRACT: The calculation deals with the anomaly in propagation of plane electromagnetic waves above an inclined conducting seam (Figs 1 and 2). Formulae (Eqs 25-27) are given which relate the magnitude and spatial extent of the anomaly to the e.m. wave frequency and the electrical conductivity of the seam. These formulae are applied to an ore seam inclined at 90° (i.e. vertical seam), 75, 60, 45, 30, 15 and ~3° to the earth's surface (assumed horizontal). The results are Eqs (35)-(37) and Figs 5-10, which can be used to calculate the phase and amplitude of anomalous magnetic and electric fields in a.c. methods of geophysical prospecting. Acknowledgments are ✓

S/049/60/000/004/012/018

EO32/E314

AUTHOR: Nikitina, V.N.

TITLE: General Solution of the Axially Symmetric Problem of
the Theory of Induction Core Sampling

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya
geofizicheskaya, 1960, No. 4, pp. 607 - 616

TEXT: The electromagnetic interaction between various
exciting elements placed inside an infinitely long cylindrical
cavity and the surrounding medium is investigated. Two exciting
elements are considered, namely, an oscillating magnetic
dipole and a circular electric current. These two cases are
illustrated in Figs. 1 and 2, respectively. General solutions
of the Maxwell equations for these cases are obtained. These
solutions can be used in an experiment in which two concentric
coils are introduced into the well, one of which excites the
electromagnetic waves and the other detects the signal thus
produced. ✓B

There are 4 figures and 5 references: 3 Soviet and 2 English.

ASSOCIATION: Akademiya nauk SSSR Institut fiziki Zemli
(AS SSSR Institute of Physics of the Earth)

9.9700

87967

S/049/60/000/010/003/014
E201/E414

AUTHOR

Nikitina, V. N.

TITLE

Diffraction on a Semi-Plane in an Absorbing Medium

PERIODICAL

Izvestiya Akademii nauk SSSR. Seriya geofizicheskaya
1960, No 10, pp. 1442-1449

TEXT The author discusses diffraction of electromagnetic waves on a semi-infinite plane with infinite electrical conductivity buried in a medium with finite electrical conductivity. The problem is an idealized case of diffraction at the edge of a conducting ore stratum. The problem may be solved by Sommerfeld's classical method of branched complex functions (Ref. 1, 2). In the present paper, this method is extended to the case of a complex wave number. Expressions are given for the electric and magnetic vectors of the diffracted waves in a form convenient for practical applications. The effect of the absorbing properties of the medium on the relative intensity of the diffracted waves is considered. The limits of applicability of the methods are considered. The paper is

IVANOV, A.P. (Moskva); NIKITINA, V.N. (Moskva)

Establishment of periodic operating conditions in an inverter.
Izv. AN SSSR. Otd. tekhn. nauk Energ. i avtom no.1:41-46 Ja-F '61.
(MIRA 14:3)
(Electric current converters)

NIKITINA, V.N.

Some calculations of electromagnetic fields when prospecting by
the use of radio waves. Izv. AN SSSR. Ser. geofiz. no.7:934-
942 J1 '62. (MIRA 1:7)

1. Akademiya nauk SSSR, Magnitnaya laboratoriya.
(Radioactive prospecting)

IVANOV, A.P.; NIKITINA, V.N.; SKUGAREVSKAYA, O.A.

Frequency interpretation of the curves of generation of
an electromagnetic field. Izv. AN SSSR. Ser. geofiz. no.3:
354-359 Mr '64. (MIRA 17:3)

1. Geologicheskii institut AN SSSR.

ACCESSION NR: AP4030337

S/0042/64/000/003/0354/0359

AUTHORS: Ivanov, A. P.; Nikitina, V. N.; Skugarevskaya, O. A.

TITLE: Frequency interpretation of curves for the establishment of an electrical field

SOURCE: AN SSSR. Izv. Ser. geofiz., no. 3, 1964, 354-359

TOPIC TAGS: electric field, frequency sounding, geophysical prospecting, field buildup

ABSTRACT: A method for setting up electrical fields for purposes of geophysical prospecting, with simplicity of equipment and techniques as primary objectives, is considered. This method is distinguished by the use of alternating current through a very broad, almost continuous, range of frequencies from tens of cycles to steady current. The field is simply established: sudden switching of direct current into a grounded electrical dipole. The entire process of field buildup is recorded by a DC amplifier in a short interval of time, on the order of a few tens of seconds. As the field spreads through the ground, it is attenuated irregularly by variations in the ground, and phase shifts give a time factor to

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the buildup process. Methods for transposing the buildup curves to frequency-sounding curves for interpreting subsurface conditions are discussed. Replotting the buildup curves to frequency-sounding curves is suitable only when the buildup curves are satisfactorily recorded and are good enough for interpretation as buildup curves. If the record is made against a noisy background, the curves are unsuitable for interpretation as buildup curves. Orig. art. has: 1 figure and 11 formulas.

ASSOCIATION: Akademiya nauk SSSR Geologicheskii institut (Academy of Sciences SSSR, Geological Institute)

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SKALOV, Konstantin Yur'yevich, kand. tekhn. nauk, red.; ZUBKOV,
Mikhail Nikolayevich, inzh.; KRAVCHENKO, Vladimir
Silyayevich, kand. tekhn. nauk; NIKITINA, Vera Nikolayevna,
inzh.; PERSIANOV, Vladimir Aleksandrovich, kand. tekhn.
nauk; DLUGACH, B.A., red.

[Port junctions and terminals; their layout and operation]
Portovye uzly i stantsii; ustroistvo i ekspluatatsiia.
Moskva, Transport, 1965. 197 p. (MIRA 18:4)

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NIKITINA, V. S., Aspirant --

"The Use of Electric Separation in the Final Beneficiation of Tin and Tungsten Concentrates." Cand Tech Sci, Moscow Inst of Nonferrous Metals and Gold imeni M. I. Kalinin, 25 Oct 54. (VM, 25 Oct 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institution (10)

SO: Sum No. 481, 5 May 55

NIKITINA, V.S., assistant.

Resistance of the Anjesky's disease virus in manure. Sbor.trud.
Khar'.vet.inst. 21:245-248 '52. (MLRA 9:12)

1. Kafedra epizootologii Khar'kovskogo veterinarnogo instituta.
(Pseudorabies) (Fertilizers and manures)

NIKITINA, V.S., assistant.

On the problem of the presence of the Aujeszky's disease virus in
lice infesting swine. Sbor.trud.Khar'.vet.inst. 21:249-250 '52.
(MLBA 9:12)

1. Kafedra epizootologii Khar'kovskogo veterinarnogo instituta.
(Pseudorabies) (Lice as carriers of disease)

NIKITINA, V.S., assistant.

Duration of viability of the virus of Aujeszky's disease in the environment. Sbor.trud.Khar'.vet.inst. 21:251-254 '52.

(MLRA 9:12)

1. Kafedra epizootologii Khar'kovskogo veterinarnogo instituta.
(Pseudorabies)

NIKITINA, V.S., assistant.

Materials for a study on how long the virus of Anjesky's disease will stay active in external surroundings (on grass and in the soil).
Sborn. trud. Khar'. vet. inst. 22:277-280 '54. (MIRA 9:12)

1. Kafedra epizootologii Khar'kovskogo veterinarnogo instituta.
(Pseudorabies)

LUKASHOV, I.I., prof.; NIKITINA, V.S., kand.vet.nauk

~~Prophylactic and therapeutic effect of gamma globulin in~~
Aujeszky's disease. Veterinariia 35 no.9:48-50 S '58. (MIRA 11:9)

1. Chlen-korrespondent Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk im. V.I. Lenina (for Lukashov). 2. Khar'kovskiy veterinarnyy institut.

(Gamma globulin) (Pseudorabies)

LUKASHEV, I.I., prof.; NIKITINA, V.S., kand. veterinarnykh nauk; NIKITIN, M.G.,
kand. veterinarnykh nauk

Prophylactic and therapeutic action of gamma globulin in Aujeszky's
disease. Veterinariia 36 no.9:24-26 S '59. (MIRA 12:12)

1.Chlen-korrespondent Vsesoyuznoy akademii sel'skokhozyaystvennykh
nauk imeni V.I. Lenina (for Lukashev). 2.Khar'kovskiy veterinarnyy
institut (for Nikitina, Nikitin).
(Pseudorabies) (Gamma globulin)

NIKITSKIY, V.Z., inzh.

New method for registering the voltage-current characteristics
of current transformers. Elek. sta. 35 no.10:75-80 0'64.
(MIRA 17:12)

NIKITINA, Ye.A.

Analyzing and forecasting anomalies of air temperature for
spring months. Trudy TSIP no.71:78-113 '58. (MIRA 11:12)
(Atmospheric temperature)

SOV/179-59-1-36/36

AUTHOR: Nikitina, Ye. A. (Moscow)

TITLE: Resistance to Ships by "Dead Water" (Soprotivleniye sudam v "mertvoy vode")

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Mekhanika i mashinostroyeniye, 1959, Nr 1, pp 188-192 (USSR)

ABSTRACT: "Dead water" is a name given by sailors to those parts of the Atlantic Ocean where a layer of fresh water forms on the surface of the ocean during certain times of the year. Often small ships meet a strong resistance in these waters which was found (Refs.1-3) as being due to the waving of high amplitude at the boundary dividing fresh and sea water. The theoretical calculations (Ref.3) show that the velocity of these waves can be expressed as:

$$(c_2^2) \approx gh' \frac{\rho - \rho'}{\rho}$$

where ρ - density of lower layer, ρ' - density of top layer, h' - thickness of

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the top layer is small in comparison with wavelength and the depth of the lower layer h also is small, then the velocity of waves could be expressed as:

$$(c_2^2) \approx \frac{\rho - \rho'}{\rho} \frac{g}{1/h + 1/h'}$$

The amplitude can be found from the expression:

$$\frac{a'}{a} = - \frac{\rho - \rho'}{\rho'}$$

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The experiments were carried out similarly to those in Ref.2; Fig.1 shows the laboratory model of the device employed. The results are presented in the form of the graphs, Figs.2-8. Fig.2 shows the relationship of the resistance R_{gr} (in grams) to the velocity v (cm/sec) when the depth of water was 35 cm, the thickness of fresh water is given for every curve, 0 - curve of resistance in homogeneous water. Fig.3 represents the result for the depth of water 15 cm. Fig.4 shows the relationship of the wave resistance R_{gr} to the depth of water in the container H cm deep (curve plotted for the maximum values only). Fig.5 shows the relationship of the amplitude a (cm) and the velocity v (cm/sec). Fig.6 shows the relationship of the resistance R_{gr} and the velocity v when the fresh water was slowly mingling with the salt water (depth of fresh water given for every curve). Fig.6 represents the relationship of R_{gr} and v - the top curve shows the resistance of the "dead water" when the depth of fresh water was 5 cm, the lower curve was plotted for homogeneous water. The internal waves were photographed at

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Resistance to Ships by "Dead Water"

(a) velocity $v = 7.2$ cm/sec, resistance $R = 1.0$ g;
(b) $v = 11$ cm/sec, $R = 2.1$ g;
(c) $v = 14.6$ cm/sec and $R = 2.0$ g. In order that the experimental data could be compared with the actual conditions, the results were multiplied by the Froude Number, i.e. the linear measurements by 100 times, the velocity by 10 times and the resistance by 1 million times. By doing this the resistance was obtained in tons and the velocity in dm/sec for ships 100 times bigger than the model one. It was observed in practice that a resistance of 1.5 tons was encountered in a layer of fresh water ("dead water") of 5 m deep when the speed of the ship was 1.2-1.5 knots (0.65 m/sec).

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SOV/79-59-1-36/36

Resistance to Ships by "Dead Water"

These data agree with the experimental results described in this work. There are 8 figures and 3 references; 2 of the references are Soviet and 1 is English.

SUBMITTED: October 21, 1958.

Card 5/5

NIKITINA, Ye.A.

Results of testing the method of forecasting changes in
specific humidity caused by the underlying surface. Trudy TSIP
no.83:13-21 '59. (Humidity) (MIRA 12:5)

NIKITINA, Ye.A.

Probable origin of forest fires due to the varies nature of the
pressure field. Trudy TSIP no.124:40-47 '63. (MIRA 16:8)
(Forest fires)

1ST AND 2ND COLUMNS

PROCESSING AND PROPERTY NOTES

60

Heteropoly compounds. I. The sodium salts of phosphotungstic acid. A. V. KAROVNIK and E. A. NIKITINA, *J. Gen. Chem.* (U. S. S. R.) 1, 240 (1931). A discussion is given of the theories of Molati-Rosenheim and Pfeiffer on the constitution of phosphomolybdic and phosphotungstic acids as well as on the di- and tri-Na salts of these acids. Methods of prepn. of di- and tri-Na tungstate with HCl are described. The quant. methods for the *dets.* of H_2O and P_2O_5 , as well as the method used by the authors are given. II. Sodium phosphomolybdate. *Ibid.* 247-52. A description is given of the existing methods for the prepn. of Na phosphomolybdate as well as the methods investigated and used by the authors. V. D. KARPENKO

1ST AND 2ND COLUMNS

PROCESSING AND PROPERTY NOTES

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H-1			
Interpretation of mixed compounds used in presence of chromates with E. A. KOSTINA and A. V. KOSTIN. (Chem. Zash. Russ. Chem. Eng. 1967, 28, 28). The determination of SO₂ in mixtures of SO₂ and other compounds is satisfactory, using a cold 1% solution of NaCl. In the presence of chromates of chromates a preliminary reduction is essential: (1) with 1% NaCl, in the cold or with 1% H₂O₂, and warming is recommended. E. S. HANSEN.			
ASB-6.6 METALLURGICAL LITERATURE CLASSIFICATION			
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